REMARKS/ARGUMENTS

In the Office Action, Claims 1-4, 12-15, 23-26, 29 and 32-34 are rejected under 35 U.S.C. §103 over U.S. Patent No. 7,006,571 to Nakaya (hereinafter as "*Nakaya6571*"). Claims 5-8, 16-19 and 30-31 are rejected under 35 U.S.C. §103 over Nakaya in view of U.S. Patent Publication No. 2001/0050957 of Nakaya (hereinafter as "*Nakaya50957*"). Claims 9, 20 and 27-28 are rejected under 35 U.S.C. §103 over *Nakaya6571* in view of *Nakaya50957* and U.S. Patent Publication No. 2003/0202607 of *Srinivasan* (hereinafter as "*Srinivasan*").

Among these rejected claims, Claims 1, 13 and 24 are independent claims and all rejected under 35 U.S.C. §103 over *Nakaya6571*. For rejecting these independent claims, the predicted image synthesizer 711 in Fig. 7 of *Nakaya6571,* which is further embodied in Fig. 10 or Fig. 11, is particularly indicated in this and previous office actions as critical evidences.

It is true that Fig. 7 of *Nakaya6571* illustrates a predicted image synthesizer 711 for receiving either global motion vectors or block motion vectors and for generating a predicted image. But, either Fig. 10 or Fig. 11 of Nakaya6571, which illustrates two different ways for implementing the predicted image synthesizer 711, fail to suggest sharing an interpolation unit for block-matching motion compensation and global compensation.

In this Office Action, Fig. 11 of *Nakaya6571* is indicated for showing that *Nakaya6571* teaches a multiplexer for selecting either a macroblock motion vector 907 or a global motion vector 904 as input to prediction units. However, it is clear to see that in Fig. 11 of *Nakaya6571* there are two synthesizers, instead of one synthesizer, connected in parallel for receiving these two different inputs. If there is an interpolation unit *embodied in* an predicted image synthesizer, as indicated in the second paragraph of Page 4 of the Office Action, there will be two interpolation units, instead of one interpolation unit, for handling the macroblock motion vector 907 and the global motion vector 904 separately. When reading the claimed inventions as a whole, the "multiplexer" of Fig. 11 of *Nakaya6571* actually teaches away from the claimed inventions because global motion vectors and macroblock motion vectors are

handled by two different synthesizers, instead of being handled by sharing an interpolation unit.

On the other hand, Fig. 10 of *Nakaya6571* does not cure such deficiency, either. Although the Block Matching Predicted Image Synthesizer 1001 and the GMC Predicted Image Synthesizer 808 of *Nakaya6571* are connected in serial, there are still two synthesizers. In other words, there are two interpolation units, instead of one interpolation unit, illustrated in Fig. 10 of Nakaya6571. Therefore, Fig. 10 of Nakaya6571 also fails to suggest sharing an interpolation unit for handling both the global motion vectors and macroblock motion vectors.

Besides, in a previous Office Action of September 26, 2007, Fig. 10 of Nakaya6571 is indicated as disclosing "that the GMC predicted image synthesizer and Block Matching predicted image synthesizer are arranged serially, in which case the operation of both units **must be** performed on all video data passing through." Such assertion does not lead to the conclusion that there **must be** an interpolation shared for handling both the global motion vectors and macroblock motion vectors. Conversely, under the teaching of Fig. 10 of *Nakaya6571*, two interpolation units, instead of one interpolation, are necessary to be embodied in both the Block Matching Predicted Image Synthesizer 1001 and the GMC predicted Image Synthesizer 808.

It is clearly to be proved by knowing that the reference numeral 804 in Fig. 10 represents a global motion compensation predicted image (col. 14, line 25 of *Nakaya6571*). Unless there is an interpolation unit embodied in the GMC Predicted Image Synthesizer 808 of *Nakaya6571*, the global motion compensation predicted image 804 cannot be produced. In fact, the two serially connected synthesizers in Fig. 10 of *Nakaya6571* are designed for decoding a bit stream generated by a corresponding encoder of Fig. 8, which performs block matching upon a reproduced image of the GMC Predicted Image Synthesizer 808.

In summary, Fig. 10 or Fig. 11 of *Nakaya6571* fails to suggest sharing an interpolation unit for handling both the global motion vectors and macroblock motion vectors as recited in Claims 1, 13 and 24. In order for a claim to be properly rejected under 35 U.S.C. §103, the teachings of the prior art reference must suggest all features

of the claimed invention to one of ordinary skill in the art. See, e.g., In re Dow Chemical, 837 F.2d 469, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); In re Keller, 642 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). Therefore, *Nakaya6571* does not render Claims 1, 13 and 24 obvious.

Other claims depend from one of Claims 1, 13 and 24 and add further features thereon and thus are also patentable over *Nakaya6571*. Accordingly, reconsideration is respectfully requested to withdraw the rejections under 35 U.S.C. §103.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, or rendered moot. Applicant therefore requests that the Examiner reconsiders all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition of allowance.

Prompt and favorable considerations of this Amendment and Reply is respectfully requested.

Sincerely yours,

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